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. APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,377	01/23/2006	Nobuhiro Takagi	L928906105	5649
52989 7590 04/03/2007 STEVENS, DAVIS, MILLER & MOSHER, LLP		EXAMINER		
1615 L. STREET N.W.			BOCURE, TESFALDET	
SUITE 850 WASHINGTON, DC 20036		ART UNIT	PAPER NUMBER	
			2611	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAÎL DATE	DELIVERY MODE	
. 3 MO	NTHS	04/03/2007	PAPER	

## Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/565,377	TAKAGI, NOBUHIRO				
Office Action Summary	Examiner	Art Unit				
	Tesfaldet Bocure	2611				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
. 1)⊠ Responsive to communication(s) filed on <u>22 Ja</u>	nuary 2 <u>006</u> .	·				
	action is non-final.					
3) Since this application is in condition for allowan	ice except for formal matters, pro	secution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-3</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 2</u> is/are rejected.						
7) Claim(s) <u>3</u> is/are objected to.	·- · · · ·					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)☐ Some * c)☐ None of:						
1.⊠ Certified copies of the priority documents have been received.						
<ul> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
						application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
3) ☑ Information Disclosure Statement(s) (PTO/SB/08)  5) ☐ Notice of Informal Patent Application						
Paper No(s)/Mail Date <u>1/23/06 &amp; 8/31/06</u> . 6) Uther:						

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#### **DETAILED ACTION**

### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The Information Disclosure Statement received on January 23, 2006 has been considered in part. There is neither translation nor a copy of the Japanese patent number 8167858. However the IDS received on August 30, 2006 has been considered in full.

## Claim Objections

3. Claim1-3 are objected to because of the following informalities: the claimed "path metrics storage means" should be clearly recited as generating a feedback input to the ACS. Otherwise as claimed, path metrics storage means is not used by any of the claimed elements. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Pugh (US patent number 6,904,105).

Pugh teaches a Viterbi decoder (fig. 2) for decoding the received signal comprising: A branch metrics calculation unit (22) for calculating the branch metrics of the received signal; path metric updating unit (24, claimed ACS) for adding, comparing and selecting the branch metrics calculated by the branch metrics calculating unit (22); path metrics storage unit (26) for storing the output from the path metrics updating unit (24); optimal path update unit (42) for temporary storing the select output from the ACS (24); optimal path memory (44, claimed path select storage section) for storing in an order over a length of series of traceback; and traceback unit (see the unit outputting the decoded output) generates a decoded output as in claim 1.

Further to claim 2, the optimal path update unit (42) having inherent register for temporarily storing the received output from the ACS in predetermined order and position.

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# Allowable Subject Matter

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent numbers 5636251 and 6587519 Citta and Tran respectively issued to disclose a decoder having ACS and memory units.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The Examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti (Jay) Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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T.Bocure